

### Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An XDSL system comprising:  
an impedance matching circuit in operative communication with a transmission line and  
an XDSL modem associated with a subscriber premises, the impedance matching  
circuit including a fixed impedance having a compromise impedance providing a  
substantial impedance match to a plurality of common impedance characteristics  
of copper transmission lines,  
wherein the impedance matching circuit provides the substantial impedance match  
without testing different impedances.
2. (Currently Amended) The XDSL system of claim 1, wherein the compromise  
impedance ~~circuit~~ comprises a resistance of approximately 620 ohms in parallel with a series  
combination of a resistor of approximately 680 ohms and a capacitor of about 2200 picofarads.
3. (Original) The XDSL system of claim 1, wherein the compromise impedance has an  
impedance value that is approximately equal to a characteristic line impedance of the  
transmission line without a bridge tap.
4. (Original) The XDSL system of claim 1, wherein the compromise impedance has an  
impedance value that is approximately equal to a characteristic line impedance of the  
transmission line with a bridge tap.

5. (New) An impedance matching circuit responsive to a transmission line and to a modem to provide an approximate impedance match to an impedance of the transmission line, the impedance matching circuit comprising:

a first fixed impedance including a first compromise value; and

a second fixed impedance including a second compromise value;

wherein at least one of the first compromise value and the second compromise value comprises an impedance value that relates to a combination of characteristics of transmission lines with and without bridge taps.

6. (New) The impedance matching circuit of claim 5, wherein the first compromise value and the second compromise value are approximately equal.

7. (New) The impedance matching circuit of claim 5, wherein the first compromise value comprises a value approximately equal to  $620\Omega // (620\Omega + 2200pF)$ .

8. (New) The impedance matching circuit of claim 5, wherein the first fixed impedance and the second fixed impedance provide an approximate impedance match to a transmission line without testing impedances during setup.

9. (New) The impedance matching circuit of claim 5, wherein a value of the first fixed impedance varies responsive to a characteristic of the transmission line.

10. (New) The impedance matching circuit of claim 9, wherein the characteristics of the transmission line comprises a physical length of the transmission line.

11. (New) The impedance matching circuit of claim 9, wherein the characteristics of the transmission line comprises a line impedance of the transmission line with a bridge tap.

12. (New) The impedance matching circuit of claim 9, wherein the characteristics of the transmission line comprises a line impedance of the transmission line without a bridge tap.

13. (New) A method comprising:

applying an impedance matching circuit to a transmission line, the impedance matching circuit responsive to the transmission line and to a modem that is associated with a subscriber premises, the impedance matching circuit including a first fixed impedance having a first compromise impedance and a second fixed impedance having a second compromise impedance;

approximating a line impedance of the transmission line using the first fixed impedance and the second fixed impedance to provide a compromise impedance match to the line impedance; and

wherein the impedance matching circuit provides the compromise impedance match without testing different impedances.

14. (New) The method of claim 13, wherein at least one of the first compromise impedance and the second compromise impedance comprises an impedance value that relates to a combination of characteristics of transmission lines with and without bridge taps.

15. (New) The method of claim 13, wherein the first compromise impedance and the second compromise impedance are approximately equal.

16. (New) The method of claim 13, wherein the first compromise impedance comprises a value approximately equal to  $620\Omega // (620\Omega + 2200pF)$ .

17. (New) The method of claim 13, wherein a value of the first fixed impedance varies responsive to a characteristic of the transmission line.

18. (New) The method of claim 17, wherein the characteristic of the transmission line comprises a physical length of the transmission line.

19. (New) The method of claim 17, wherein the characteristic of the transmission line comprises a line impedance of the transmission line with a bridge tap.

20. (New) The method of claim 17, wherein the characteristic of the transmission line comprises a line impedance of the transmission line without a bridge tap.